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HIGHLIGHTS

of

INDIAN VITAL STATISTICS

1966

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FOREWORD

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This compilation selects the main features of the major
study now in process of production.

Supporting data and discussions of computation of rates
is omitted for purposes of avoiding confusion, as are also all
detailed tables. These can be studied in detail in the major report.

Accurate assessment of Indian vital statistics is not
possible until two years after the year under study because of
difficulties in collecting full data and checking their accuracy.

Some 15% of births are apparently not registered in the year
of birth and the proportion seems to be rising.

HIGHLIGHTS OF INDIAN VITAL STATISTICS
1966

Population

Corrected for late registration of births in 1966,
Total year-end population   225,372
Estimated mid-year population   222,303
                                                 males   113,965
     females 108,338

Percentage Distribution of Indian Population
by Provinces

Province	Per cent of Indian population
P.E.I.	0.18
N.S.	1.87
N.B.	1.74
Que	10.75
Ont	23.07
Man	13.83
Sask	13.91
Alta	11.29
B.C.	19.76
Yukon	1.04
N.W.T.	2.55
Canada	100.00

The greatest number of Indians - Ontario.
British Columbia has the second largest Indian population.
Taken together, however, the Prairie Indians constitute
39% of the total Indian population and present unique
problems both health and economic.

Indian Populations as Per Cent of Provincial Populations

Province	Total Indian Population % prov. pop.	"Non-integrated" Indians % prov. pop.
P.E.I.	0.37	0.23
N.S.	0.56	0.41
N.B.	0.64	0.50
Que	0.40	0.32
Ont	0.76	0.53
Man	3.25	2.78
Sask	3.30	2.82
Alta	1.74	1.58
B.C.	2.37	1.90
Yuk	16.31	10.56
N.W.T.	20.06	19.18
Canada	1.13	0.90

"Non-integrated" Indians are those listed as NOT "Off Reserve".

If Ontario has the greater number of Indians, Manitoba and
Saskatchewan have the greatest "Indian Problem". There, Indians not only
form a significantly larger proportion of the total provincial population,
fewer have moved off reserve and, as will be shown later, the rate of
growth of the Indian population is much greater. (There are also more
Indians of lower socio-economic status and large numbers of poorer
Metis adding to the social problem).

Age Distribution

The average age of the Indian population is under 21 years.
56% of males and 58% of females are under 20 years of age.
33% "   "   " 35% "   "   "   "   10 "   "   "
4.7% of all Indians are now, however, over 65 "   "   "
This percentage is now rising quite rapidly.
The oldest Indian in 1966 was 106 years old, in Quebec, male.

The "Load of Dependency" or ratio of Indians under 15 and over 64 (conventionally
regarded as the "unproductive dependents" in society) to Indians between 15-64,
(conventionally the "mainstay" of any population).

Province	"Dependents" supported by each "Productive" Indian
P.E.I.	8.24
N.S.	8.11
N.B.	9.45
Que	8.60
Ont	8.95
Man	11.82
Sask	12.62
Alta	12.14
B.C.	10.78
Yuk.	11.01
N.W.T.	10.00
Canada	10.48

Indians, aged 15-64 years, are "supporting" significantly more
"dependents" on the prairies than elsewhere and, in fact, fewer of them are
really "productive", in the economic sense, than among Indians in the
Eastern provinces who support fewer dependents. This has health as well as
economic significance.

Marriages

Only 54.31% of Indian marriages were between Indians, 45.69% of Indians marrying in 1966 married non-Indians. Almost twice as many Indian women marry non-Indians as Indian males who marry non-Indian women, annually. The result is a net "loss" in the "Registered Indian Population" annually, in 1966 of 0.1%. The marriage of an Indian female to a non-Indian is equivalent to the "death" of a marriageable female, so far as the officially registered population is concerned. There is a marked deficiency in the relative number of Indian females to males in the Indian population and some 5% of marriageable males can not hope to find Indian brides. This is of some sociological importance.

Marriages of Indian women to non-Indians are much commoner in British Columbia than anywhere else. Marriages of Indian males to non-Indians are somewhat commoner among Quebec Indians than others. 50% of Indian males over 16 are married, 55% of all Indian females over 16 years of age.

Indian Marriage Rates

Province	Rate per 1000 population
P.E.I.	12.53
N.S.	5.29
N.B.	6.19
Que	7.82
Ont	8.44
Man	8.62
Sask	7.37
Alta	6.46
B.C.	8.77
Yuk	4.31
N.W.T.	3.70
Canada	7.84

These rates do not differ significantly from provincial and national rates. (National marriage rate 7.8/1000).

Divorce and Marriage Breakdown

Divorces are relatively uncommon among Indians.

Divorce Rates

Province	Indian Divorce Rate per 100,000 pop.	Provincial Divorce Rates per 100,000 pop.
P.E.1.	-	16.6
N.S.	-	53.7
N.B.	-	25.1
Que	-	17.1
Ont	15.6	58.9
Man	3.3	54.4
Sask	6.5	33.6
Alta	-	107.1
B.C.	11.4	113.4
Yuk	-	146.0
N.W.T.	-	10.4
Canada	7.2	51.2

Other forms of marriage breakdown are, however, commoner. In Quebec, "separations" replace divorce. About 1 in every 40 Indian marriages break down. Indian marriages in Manitoba and Saskatchewan and in the N.W.T. are the most stable. Marriage breakdown, in all forms, is much commoner in British Columbia and Alberta than among other Indians.

Population Growth

Vital Index

(Births divided by deaths or rate of replacement by new births of loss by death)

Province	Indian Vital Index	Provincial Vital Index
P.E.I.	4.00	2.10
N.S.	4.36	2.35
N.B.	4.39	2.67
Que	4.58	2.84
Ont	3.65	2.43
Man	5.60	2.27
Sask	5.83	2.56
Alta	5.97	3.16
B.C.	3.35	2.00
Yuk	2.88	4.50
N.W.T.	6.74	5.06
Canada	4.50	2.59

Indians dying are being replaced almost twice as fast as all Canadians.

Note the very high rate of replacement among Prairie Indians and of Indians in the N.W.T.

Note also the relatively low rate of Indian replacement in British Columbia and the Yukon.

Birth Rate

Province	Indian Birth Rate	Provincial Birth Rate
P.E.I.	30.08	20.3
N.S.	29.34	20.1
N.B.	31.71	20.6
Que	29.71	19.0
Ont	31.72	19.0
Man	47.69	18.7
Sask	51.99	19.9
Alta	46.62	20.9
B.C.	35.90	17.3
Yuk	31.03	25.7
N.W.T.	36.85	40.3
Canada	39.12	19.4

Although still twice the National birth rate, the Indian birth rate is dropping even faster in most Indian populations EXCEPT among Prairie Indians. The high birth rate among those Indians is compounding the problems of these Indians.

Natural Increase

(Excess of Live Births over Deaths or Net Increase)

Province	Indian Natural Increase per 1000 pop.	Provincial Natural Increase per 1000 pop.
P.E.I.	22.56	10.6
N.S.	22.61	11.5
N.B.	24.49	12.9
Que	23.22	12.3
Ont	22.79	11.2
Man	39.17	10.5
Sask	43.06	12.1
Alta	38.81	14.3
B.C.	25.18	8.6
Yuk	20.26	20.0
N.W.T.	31.38	32.3
Canada	30.42	11.9

The corrected rate of Indian natural increase in 1965 was 32.67. Indian natural increase is dropping sharply EXCEPT among Prairie Indians.

Natural Increase accounts for almost all the increase in the Indian population but only 68% of the increase in the Canadian population. Hence the Indian population remains at just over 1% of the total population and is not rising in relation to the total or only very slightly, certainly not as fast as the foregoing reproduction rates would seem to suggest. The percentage of Indians in the Canadian population as a whole has remained at just around 1% for the past ten years. If the Indian birth rate continues to fall, Indians will gradually become a smaller and smaller proportion of the Canadian population. This may not be the case in Manitoba and Saskatchewan, however.

Illegitimacy

Of the 18,032 unmarried Indian females over the age of 16 years,
7,308 or 40.53% were mothers.

Per Cent of Unmarried Females Over 16 yrs
already Mothers

Region	Per Cent of Unmarried Females
Maritime provinces	24.15
Quebec	11.82
Ontario	29.60
Manitoba	47.39
Saskatchewan	60.96
Alberta	55.77
British Columbia & Yukon	47.74
Northwest Territories	37.57
Canada	40.53

Quebec Indians stand in dramatic contrast to other Indians.
The situation among Saskatchewan Indians is so startling as to suggest
pregnancy is a cultural prelude to marriage.

On the above showing, if "the pill" is to be effective in
really reducing the birth rate among Prairie Indians, it will have to be
issued to all girls over 15 or 16. Arguments that this would lead to
"immorality" falter in face of the fact that over 60% of unmarried females
are mothers.

Per Cent of Total Indian Live Births
Illegitimate

Province	Per Cent of All Births
P.E.I.	8.33
N.S.	22.13
N.B.	17.07
Que	10.00
Ont	27.23
Man	27.56
Sask	41.73
Alta	43.42
B.C.	41.79
Yuk	75.00
N.W.T.	17.22
Canada	33.29

To express it tactfully, twice as many Indian children were born legitimately as illegitimately in 1966. These rates are so excessive that comparison with provincial rates is best omitted. The national illegitimacy rate in 1966 was 7.6% of all live births and that was regarded as "high" and somewhat alarming. Among the provinces, British Columbia always has the highest rate, in this case 12.1% as against 41.8% for British Columbia Indians.

About 10% of Indian illegitimate births are subsequently "legitimised" by marriage, annually. In 1966, 10.26% of the Indian males who married non-Indian girls were so legitimising the births of their children, 4.95% of the non-Indian males who married Indian girls. At the end of the year 90.36% of the illegitimate births remained illegitimate.

Total Fertility Rates

The computation of these rates is discussed in detail in the major report.

Indian and Provincial Total Fertility Compared

Province	Indian Fertility Rate (per 1000 women)	Provincial Fertility Rate (per 1000 women)	Ratio of Indian to Provincial rate
P.E.I.	4375	3439	1.27
N.S.	4552	3171	1.44
N.B.	5143	3284	1.57
Que	4874	2710	1.80
Ont	5074	2811	1.81
Man	8801	2892	3.04
Sask	9565	3225	2.97
Alta	8284	3174	2.61
B.C.	6271	2658	2.36
Yuk	5305	4036	1.31
N.W.T.	6508	6755	0.96
Canada	6726	2892	2.33

The fertility of Indian women in the Eastern provinces is not much greater than that of other women but the fertility of Indian women on the prairies is 3 times that of other women. Indian women in British Columbia are twice as fertile as other women in that province.

The above figures indicate that the "average" number of children born to 1 Indian woman in her life time is 6.726. The "average" number born to 1 Canadian woman is 2.892. Prairie Indian women are bearing "on average" 9 children in their life time.

"Gross Fertility" Rate

The Dominion Bureau of Statistics use this term to describe the
replacement of females by females in the next generation. If greater than unity,
the population will tend to increase by "natural increase", if around unity,
the population will be stable, if much under unity, the population will decrease.

Indian and Provincial Gross Reproduction Rates

Province	Indian Gross Reproduction Rate	Provincial Gross Reproduction Rate	Ratio of Indian to Provincial Rates
P.E.I.	2.358	1.724	1.37
N.S.	1.859	1.523	1.22
N.B.	2.213	1.606	1.38
Que	2.252	1.284	1.75
Ont	2.195	1.361	1.61
Man	3.464	1.438	2.41
Sask	4.041	1.588	2.54
Alta	3.391	1.506	2.25
B.C.	2.442	1.299	1.88
Yuk	2.498	1.808	1.38
N.W.T.	3.439	2.987	1.15
Canada	2.653	1.369	1.94

Each Indian woman is being replaced by 2.653 Indian women in each
successive generation at present, each Canadian woman by 1.369 new Canadian
women. Note, again, the situation among Prairie Indians. This would
indicate a very rapid future increase in the Indian population.
Prairie Indians have an explosive potential for rapid natural increase.
In contrast Indians East of the prairies do not differ to any really
significant degree from other people.

Mortality

Crude Death Rates

Province	Indian Crude Death Rate	Provincial Crude Death Rate	Ratio of Indian to provincial rate
P.E.I.	7.52	9.7	0.78
N.S.	6.73	8.6	0.78
N.B.	7.22	7.7	0.94
Que	6.49	6.7	0.97
Ont	8.93	7.8	1.14
Man	8.52	8.2	1.04
Sask	8.92	7.8	1.14
Alta	7.81	6.6	1.18
B.C.	10.72	8.7	1.23
Yuk	10.78	5.7	1.89
N.W.T.	5.47	8.0	0.68
Canada	8.70	7.5	1.16

This would seem to present the Indians in a very fair light, especially in the Eastern provinces where their crude mortality rates are lower than for the provinces as a whole. Even on the prairies, the Indian mortality rates are not significantly greater. Only in British Columbia and the Yukon would the Indian death rate attract attention as being alarmingly high by contrast with the rates everywhere else. These figures, however, discount the differing age and sex distributions of the various populations. Whereas Indian population can be reasonably contrasted with Indian population, as being of much the same age and sex distribution patterns, Indian populations can not be compared directly with provincial populations, from which they differ markedly in pattern. For comparison with provincial rates, the Indian mortality rates must be standardised.

Standardised Indian Death Rates

Standardising the Indian mortality data for Indians as a whole to the age and sex distribution of the Canadian population as a whole in 1966,

The crude Indian Male Death Rate   of   9.70 per 1000 males becomes
Standardised "   "   "   "   "   11.30 " " "

The crude Indian Female Death Rate   of   7.64 per 1000 females becomes
Standardised "   "   "   "   of   9.70 " " "

The total crude Indian Death Rate   of   8.70 per 1000 population becomes
Standardised Indian Death Rate   "   10.50 " " "

In British Columbia, which showed the highest Indian mortality rates, the following results,

Standardised Male Death Rates (Indian) in B.C.   =   14.91 per 1000 males
    "   Female "   "   "   " "   =   12.60 " " females
    "   Indian Death Rate in British Columbia   =   13.76 " " population

The national death rates in 1966 were,

Canadian Male Mortality Rate   =   8.7 per 1000 males
   "   Female   "   "   =   6.2 " " females
   "   Total   "   "   =   7.5 " " population

Mortality among Indians in British Columbia in 1966 was thus almost TWICE that among Canadians as a whole and much higher than among all other Indians.

Comparative Ratios of Indian Age and Sex Specific Mortality Rates
to National Age and Sex Specific Mortality Rates
(Indians as a whole)

Age Group	Ratio of Indian Male Mortality to National Male Mortality	Ratio of Indian Female Mortality to National Female Mortality
Under 1	2.2 : 1	2.5 : 1
1 - 4	3.8 : 1	4.6 : 1
5 - 9	1.6 : 1	3.3 : 1
10 - 14	1.5 : 1	1.5 : 1
15 - 19	1.7 : 1	2.5 : 1
20 - 24	3.3 : 1	5.8 : 1
25 - 29	3.8 : 1	8.3 : 1
30 - 34	3.6 : 1	5.4 : 1
35 - 39	3.4 : 1	5.0 : 1
40 - 44	2.7 : 1	3.4 : 1
45 - 49	1.8 : 1	2.5 : 1
50 - 54	1.0 : 1	1.7 : 1
55 - 59	1.2 : 1	2.3 : 1
60 - 64	0.9 : 1	1.9 : 1
65 - 69	1.2 : 1	1.2 : 1
70 - 74	1.0 : 1	1.4 : 1
75 - 79	0.9 : 1	0.9 : 1
80 - 84	0.8 : 1	0.9 : 1
85 or more	0.8 : 1	0.8 : 1
All ages	1.5 : 1	1.9 : 1

Indian male mortality was 1.5 times heavier than Canadian male mortality but Indian female mortality almost TWICE Canadian female mortality.

From age 50 onward Indian Male Mortality was actually the same as among all Canadian males of comparable age but Indian Female Mortality did not reach parity with Canadian female mortality until age 65 or more.

Indian Female Mortality in the 3rd decade of life was startlingly high and remained excessive in the 4th and 5th decades.

Indian Male Mortality was strikingly high in the 3rd and 4th decades of life.

In both sexes, Indian Mortality was excessive in the 1st decade of life, more so AFTER the 1st year of life.

Mortality in Active Adult Life
(15 - 64 years)

Province	Mortality Rate per 1000
P.E.I.	4.63
N.S.	4.80
N.B.	6.99
Que	4.83
Ont	6.71
Man	5.25
Sask	6.03
Alta	5.31
B.C.	9.70
Yuk	4.48
N.W.T.	2.81
Canada	6.49

Mortality among Indians in the prime of life in British Columbia is startlingly high, even in contrast with other Indian groups.

Comparative Ratio with National Rate

	Canadian Death Rate per 1000	Indian Death Rate per 1000	Ratio of Indian to National Rate
Males aged 15-64 yrs.	5.10	7.36	1.44
Females " " "	2.60	5.55	2.13
Canadians aged 15-64 yrs.	3.85	6.49	1.69

In this age group, Indian female mortality is outstandingly high as compared with Canadian women as a whole.

Indian Infant Mortality Rates

Province	Indian Infant Mortality Rate per 1000 live births	Ratio of Indian to Provincial rate	
P.E.I. (only 1 death)	83.33	3.3 : 1	
N.S.	32.79	1.3 : 1	
N.B.	24.39	1.0 : 1	
Que	42.25	1.7 : 1	
Ont	34.42	1.7 : 1	
Man	60.71	2.8 : 1	main
Sask	59.08	2.4 : 1	troubl
Alta	52.99	2.5 : 1	zone
B.C.	62.78	2.6 : 1	
Yuk (only 9 deaths)	125.00	2.3 : 1	
N.W.T.	38.28	0.5 : 1	
Canada	52.44	2.2 : 1	

These figures arederived from data corrected for late registration of
births and illustrate vividly the influence this has on the rate. Previous
estimates had placed the Indian I.M.R. at under 40 per 1000 live births.

Note the dramatic difference between the infant mortality rates
for Indians in the East as compared with prairie Indians and especially Indians
in British Columbia. (Rates for P.E.I. must be discounted because the
population is so small).

Indian infant mortality as a whole is still over TWICE the National
Infant Mortality Rate but only because of the alarming state of affairs in
British Columbia and the prairie provinces.

Contrary to previous impressions, corrected data now indicate that
the Indian Infant Mortality Rate has been rising, not falling, over the past
three years. Preliminary studies indicate the rate in 1967 was over 53 per 1000
live births but the data are not yet complete.

SUMMARY

Despite a steadily declining birth rate, the Indian population is still increasing at a rate of about 3% per annum. The rate is decreasing slowly. The proportion of Indians in the Canadian population as a whole is not or only very slowly increasing. It has been almost steady at around 1% for many years. Immigration adds what the lower rate of Canadian natural increase would fail to add.

The rate of population growth is uneven, being excessive among prairie Indians and quite moderate among Indians in the Eastern provinces. Prairie Indians comprise about 3% of the total population in these provinces and this proportion is increasing. The "Indian Problem" is liable to increase in the prairie provinces, particularly in Saskatchewan.

The Indian death rate has been fairly steady for the past five years, dropping very slowly by fractions. Standardised to the age and sex distribution of the Canadian population as a whole, it compares with the national rate in the ratio of 10.5:7.5.

Indian death rates are also uneven, being somewhat lower for Eastern Indians, only slightly higher for prairie Indians and excessive only in British Columbia. Mortality among young Indians is generally excessive in comparison with the mortality among young Canadians of comparable age, particularly among young Indian women. This is most marked in British Columbia. Older Indians do not suffer higher mortality than other people of comparable age.

Indian infant mortality as a whole is still at over twice the national infant mortality rate. It is, however, extremely uneven, being quite moderate among Eastern Indians but high among prairie Indians and excessively high among Indians in British Columbia and the Yukon.

Indians in the Yukon differ sharply in health indices from Indians in the Northwest Territories where, indeed, the health indices rather surprisingly present a gratifyingly "healthy" profile. Indians in the Yukon have some of the worst rates in the country, in fact, in the world.

Illegitimacy is a major problem. In Saskatchewan, over 60% of females over 16 who have never been married are mothers, over 40% of all unmarried Indian females over the age of 16 years. One third of all Indian live births in 1966 were illegitimate. In view of these facts, "the pill" is unlikely to effect any dramatic lowering of Indian birth rates unless it becomes widely available to teenage school girls and all young unmarried Indian women.

About 10% of illegitimate births are legitimised annually by subsequent marriage of the parents.

Major health trouble spots are found in the prairie provinces and, in particular, in British Columbia and the Yukon. Infant mortality is the main problem on the prairies but British Columbia has excessive mortality rates of every description affecting all ages and both sexes but especially young women.